

I. THE REJECTIONS OF CLAIMS 1-9 UNDER 35 U.S.C. § 102(b)

Claims 1-9 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,791,658 to Johnston (hereinafter "Johnston"). Respectfully, Applicant traverses.

Claim 1, from which claims 2-9 ultimately depend, relates to a sealing arrangement including a sealing ring having a sealing lip curved forward in the direction of an area to be sealed off. The sealing ring is pre-tensioned to surround and form a seal around a circumference of a machine element. The sealing lip includes at least one recess on a side facing radially away from the machine element, in which the recess only connects and allows flow between the area to be sealed off and a surrounding area if the sealing ring is incorrectly mounted and the sealing lip is erroneously curved forward in the direction of the surrounding area.

When the machine element is inserted such that the sealing lip is erroneously curved forward in the direction of the surrounding area, the recess faces the machine element (P. 8, lines 21-26; Figure 3). In this manner, a pressure test may easily determine the faulty condition, since any pressure applied is very rapidly released via the recess. (P. 9, lines 1-6).

Johnston purportedly concerns a seal design having a bi-directional pumping capability. Referring to Figures 1 and 2 of Johnston, there is seen rear and sectional views, respectively, of a shaft seal 12 for sealing off a rotating shaft 14. The shaft seal includes a seal element 24 having a flex section 32 which, when flexed by shaft 14, forms a seal lip 34 having a seal face 36 contacting the shaft 14. (See Johnston, col. 2, lines 55-65). The insertion of shaft 14 into the shaft seal 12 defines an oil side 18 (i.e., the side to be sealed off) and an air side 20 (i.e., the surrounding area). The seal face 36 includes a plurality of sinusoidal undulations on a side of the seal face 36 facing radially toward the shaft 14 to provide a pumping action toward the oil side 18 of the shaft seal 12. (See Johnston, col. 3, lines 1-10). In one embodiment, the seal face 36 also includes a plurality of

circumferential grooves 56 to reduce a radial force exerted upon the seal face 36. (See Johnston, col. 3, lines 63-67). Similar to the sinusoidal undulations, these grooves 56 are provided on the side of the seal face 36 facing radially toward the shaft 14.

To reject a claim based on anticipation, an individual reference must identically disclose each and every limitation as set forth in the claim. See Verdegaal Bros. V. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). One or more of these limitations may be inherent in the reference. However, the fact that a certain characteristic may occur or be present in the prior art is not sufficient to establish inherency of that characteristic. Rather, to establish inherency, the missing descriptive matter must necessarily be present in the prior art reference. See In re Oelrich, 666 F.2d 578, 581-82 (C.C.P.A. 1981).

It is respectfully submitted that Johnston does not identically disclose each and every limitation of claim 1. Specifically, Johnston does not disclose a sealing ring having a sealing lip that includes, "on the side facing radially away from the machine element, at least one recess," as recited in claim 1. As described above, Johnston discloses a plurality of sinusoidal undulations and grooves 56 on a side of the seal face 36 **facing radially toward** the shaft 14. Johnston does not describe any purported features of the side of the seal face 36 **facing radially away** from the shaft 14, much less whether the "side facing radially away . . . includes at least one recess," as recited in claim 1. In fact, Figures 2, 3, 6, 7, and 8 each show the side of the seal face 36 **facing radially away** from the shaft 14 as having a smooth and featureless surface.

Further regarding claim 1, Johnston does not disclose the at least one recess as "[allowing] flow . . . if the sealing ring is incorrectly mounted and the sealing lip is erroneously curved forward in the direction of the surrounding area." As described above, Johnston shows that the side of the seal face 36 **facing radially away** from the shaft 14 has a smooth and featureless surface, devoid of any recesses. Thus, if the shaft

14 of Johnston were erroneously inserted into the shaft seal 12 such that the seal lip 34 curved forward in the direction of the air side 20 (i.e., the surrounding area), flow would presumably be prevented, not allowed.

For at least the foregoing reasons, it is respectfully submitted that Johnston does not anticipate claim 1. Further, since claims 2-9 ultimately depend from claim 1, it is respectfully submitted that Johnston does not anticipate these claims for at least the same reasons.

Further regarding claims 7-9, Johnston does not disclose that the sealing lip has, "on the side radially facing the machine element, a recirculating spiral groove for the medium that is to be sealed off," as recited in these claims. Applicant recognizes that Johnston describes a plurality of sinusoidal undulations and grooves 56 on a side of the seal face 36 **facing radially toward** the shaft 14. However, neither the undulations nor the grooves 56 are described as "spiral" in form. Furthermore, since the grooves and the gap formed by the undulations may, for example, be circular, it cannot be said that "spiral" grooves, as recited in claims 7-9, are necessarily inherent in Johnston.

For at least the foregoing reasons, it is kindly requested that the rejections of claims 1-9 under 35 U.S.C. § 102(b) be withdrawn.

## II. CONCLUSION

For at least the foregoing reasons, Applicant respectfully submits that the present invention is new, non-obvious, and useful. Prompt reconsideration and allowance of pending claims 1-17 are therefore earnestly solicited.

Respectfully submitted,

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